The second case was one of ascites from tumor of the spleen of unknown nature. After various diuretics had been employed without much success, excellent results were obtained by faradization of the abdominal walls, commenced after aspiration had been performed. Diuresis was increased to such an extent that a second aspiration was not needed for six weeks, instead of every five days as previously. Later, however, the fluid increased in quantity in spite of the use of electricity. The author discusses very fully the possible explanation of the cause of the absorption of fluid, and concludes that at present we cannot decide in what way the treatment acts.

PERIODIC INTERMITTENT ALBUMINURIA.

P. MERKLEN (*Arch. Gén. de Méd.*, August, 1888, 140) describes three cases in which albuminuria appeared only in the daytime, and was entirely absent while the patients were kept at rest in bed; while food, nervous excitement, and exposure to cold were without influence. He concludes that the regular intermittence of albuminuria, the integrity of the general health, and the usually complete recovery are in favor of the view that this singular affection is simply functional; a sort of repeated renal congestion. This would be always induced by the erect station, or by muscular exercise, owing to an habitually atonic state of the circulatory system. In regard to the exact mechanism of albuminuria, it is supposable that the disturbed renal circulation modifies the glomerular epithelium in such a manner that temporary transudation of albumin is permitted. As soon as the renal circulation assumes its normal condition the vitality and impermeability of the epithelium are restored. Why the albuminuria should cease at about 6 P. M., before the hour of retiring, is by no means clear. The prognosis is good, except that repeated functional disorder may pave the way for some organic kidney affection. This has, however, but rarely occurred. It is well to bear in mind that this intermittent albuminuria is carefully to be distinguished from that of the early stages of interstitial nephritis. The latter should be easily distinguished by the concomitant symptoms, though they have been frequently confounded.

SURGERY.

UNDER THE CHARGE OF

J. WILLIAM WHITE, M.D.,

SURGEON TO THE PHILADELPHIA AND GERMAN HOSPITALS; CLINICAL PROFESSOR OF GENITO-URINARY SURGERY IN THE UNIVERSITY OF PENNSYLVANIA.

SURGERY OF THE LUNG AND THORAX.

Within the last few months a number of important papers upon pulmonary surgery have appeared, showing an increasing tendency to apply modern surgical methods to the thoracic viscera.

Pulmonary abscesses are rare sequelæ to acute pneumonia, but occasionally after recovery from an advanced stage of the acute disease the clinical signs of such abscesses may be found. They are of grave significance, for all their ways of healing, whether by absorption, as by breaking into a bronchus, or into the pleura, the pericardium, or the liver, or externally, are dangerous. This has led surgeons to attempt to evacuate them by thoracentesis, which is easier than in the case of tuberculous vomicæ, for they are generally surrounded by healthy tissue, nearer the base of the lung and more within reach, and probably, also, the patient is in a better state to stand operation. Out of ten cases cited between 1880 and 1888 (*Rev. de Méd.*, Aug. 1888) there was complete cure in four (under Rüneberg, Queifs, Rohden, and Quincke); cure with a small fistula in three (under Finne, Bacchini, and Fenger); and death in three in whom there was a gangrenous cavity occupying nearly the whole of the lower lobe of the lung (under Sutton, Smith, and Spillman), and who were profited temporarily by the operation, but died of gradual exhaustion after it. These were all cases of abscess following acute pneumonia. The diagnosis of the exact position is often difficult, and an exploratory puncture is of value. Adherence of the two layers of the pleura before opening the abscess is also of value. RÜNEBERG (*Deutsch Arch. für klin. Med.*, p. 93) advises the actual cautery or stitches to aid in producing adhesion.

Spillman and Haushalter operated on the fifteenth day of an acute pneumonia, and withdrew a little fetid pus, and injected iodoform and glycerine. The patient died, and at the autopsy a small abscess was found which had not been hit by the needle. In England the more common method is to open the abscess freely and wash out with an antiseptic. When proper, a slow entry into the lung by thermo-cautery, and the subsequent insufflation of antiseptic powders. (*The Practitioner*, Dec. 1888.)

QUINCKE (*Berlin. klin. Wochenschrift*) reports two cases of pneumonotomy. In both access was gained to the lung tissue by the gradual destruction of the overlying tissues by chloride of zinc paste. In one an abscess cavity was reached in this way; in the other no pus was found. Both recovered. A case recently occurred in New York which showed the difficulty of reaching pus in certain conditions even when its presence has been ascertained by the needle. On the resection of a rib at the point where a puncture had shown pus, the pleura was opened, but nothing but blood was obtained; a second rib was resected with the same result; and it was only after resection of a third rib that the abscess cavity was opened and drained. (*New York Med. Journ.*, Dec. 8, 1888.)

MR. HOWARD MARSH (*The British Medical Journal*, Oct. 13, 1888) concludes that while in recent cases the aspirator *may* be useful, yet that generally it is better to make an incision and establish free drainage. He agrees with Mr. Godlee, that an opening at the lowest part of the chest, where the cavity is soonest obliterated, is less efficient for drainage than one placed higher, opposite the part of the empyema, which is the last to close. In cases in which the empyema is chronic, and in which suppuration continues after a free opening has been made, Estlander's operation, consisting of a removal of a portion of two or more of the ribs, should be performed. It is valuable, first, by permitting the insertion of the finger to break down adhesions and evacuate secondary collections of pus; next, by aiding in the approximation of the thoracic walls in those cases in which, the lungs being bound down, the cavity cannot close on account of the rigidity of the parietes.

Mr. Pridgin Teale (*Ibid.*) formulates the following views relative to the surgery of the chest: The inrush of air at the time of operation is harmful because it reduces the power of the thoracic wall and inspiration; when life is thus threatened the problem will be to provide adequate drainage and at the same time prevent the inrush of air; the region of the diaphragm is that where abscesses amenable to surgical treatment most frequently occur; they can be more safely opened through the lower angle of the thorax, if there is dulness there, than through the abdomen; antiseptic washing is of value during the early period but unnecessary later; the excision of ribs is reserved for special cases.

Sir Spencer Wells reported (*Ibid.*) a case of abscess of the lung operated on forty years ago, the patient being still alive and well. In this case the abscess and resulting fistula were in the right axilla.

In a very elaborate paper in the *Edinburgh Medical Journal* for Dec. 1888, **Dr. J. W. B. Hodsdon** inquires into the mechanism of the cure of empyema, and the causes which produce failure to cure. In favorable cases the cavity is closed in the following manner:

The lung is expanded intermittingly to a slight extent during normal breathing, markedly so by forced expiration and coughing, and these forces are aided by blood-pressure, which is an important factor; air is forced out at the opening during expiration, and is to some extent prevented entering by the falling together of the edges of the wound, or by the valvular action of the dressings, in consequence of which, and also of the possible absorption of a small quantity of air between the times of dressing, if it be not necessary to do so frequently, a degree of negative pressure is produced in the cavity, which is, of course, also favorable to expansion. As the lung is being expanded by these means, the formation of adhesions between the two pleural surfaces serves to maintain it in contact with the chest-wall, which has, in proportion to its elasticity, been falling in to meet the lung, while the diaphragm, by rising up and becoming adherent, and the mediastinum, by returning to its normal position as expansion progresses, also assist in the closure of the cavity. Failure on the part of the walls of the empyema to come together generally occurs in adults. The circumstances which give rise to it are related to the lung and to the chest-wall.

1. *As to the lung.* It may have lost its elasticity in consequence of inflammatory changes in its structure, producing fibroid induration and other conditions which render it wholly or partially incapable of expansion. By far the most common cause, however, although the two may be combined, is the fixing of the lung by dense adhesions and the coating of its surface with a thick layer of lymphoid material. If we examine the thorax in such a case, we find the pleura enormously thickened, the lung adherent, and partially or totally incapable of expansion, lying posteriorly in the hollow formed by the angles of the ribs, and constituting part of the wall of an abscess cavity lined with granulations. This state of matters usually arises from delay in opening, but in patients the subject of tubercle, or who have a tubercular tendency, it may occur at a comparatively early period, and is a strong argument in favor of early opening in such individuals. Then, again, septicity and tension in

consequence of bad drainage, favor a continuance of suppuration, which, in its turn, conduces to thickening of the pleuræ and hindrance to expansion.

2. *With regard to the chest-wall* one need only remark that the cause of failure on its part is rigidity, which is, of course, marked in proportion to the age of the patient; and that while the ribs do fall in to a certain extent in all cases, this occurs only to a satisfactory extent in young persons. The diaphragm and mediastinum fail to do good, in consequence of want of expansion of the lung producing a sufficient degree of negative pressure in the pleural cavity to enable the former to rise up or the latter to return to its normal position.

There is a class of cases between these two which we very frequently meet, and which, perhaps, most commonly come under the care of the surgeon. They are the cases in which expansion of the lung, falling in of the chest-wall, and rising up of the diaphragm take place to a certain extent; but an obstinate fistulous opening remains, and the patient is exposed to all the risks of prolonged suppuration. This condition is most prone to occur where opening has been delayed, septicity is present, and drainage has been imperfect. We find in such cases the lung unequally expanded throughout, adherent to the chest-wall where expansion has taken place; and where this has failed an abscess cavity exists, or there may be several such abscesses communicating with one another, or with the external wound by narrow orifices. This state of matters is due to portions of the lung being incapable of expansion from changes in its structure, and to thickening of the pleura over it, or to both of these conditions.

THE RADICAL CURE OF FEMORAL HERNIA.

The literature of the radical cure of hernia, while becoming most extensive, is markedly deficient as regards operative details applicable to the femoral variety. Macewen, Barker and others dismiss the subject in a few words. DR. H. W. CUSHING describes (*The Boston Med. and Surg. Journal*, December 6, 1888) the method he employed in the case of a boy, aged twelve years, with an irreducible femoral hernia of four years standing. The sac was lightly adherent to the edge of the saphenous opening. By dissecting through the subjacent tissues between the spermatic cord and the outer pillar of the external abdominal ring, the sac was exposed as it entered the crural ring. It could then be freed from within outward, by general traction, manipulation, and dissection; and after division of the adhesions to the saphenous opening became perfectly reducible, leaving the femoral vein exposed throughout this entire distance. The sac was now opened, and with scissors and scalpel the omental adhesions to its inner surface were, with considerable difficulty, divided. The omental mass, measuring two inches by one and one-half by one and one-half, was then ligated, cut away, and its stump pushed back into the peritoneal cavity, leaving the sac resting free and empty in the crural ring. A continuous suture closed the sac, which was then folded on itself and fixed within the abdomen, *à la* Macewen. The suture effecting this reduction passed through the crural canal and upward to the surface through the transversalis fascia, conjoined tendon, and aponeurosis of the external oblique. The crural ring was next closed by suturing Poupart's ligament with a "quilted suture" to the pubic portion of the fascia lata and the fascia covering the pectineus muscle, the femoral vein being protected with a retractor. When secured the opening apparently became impervious, the folded sac forming a pad, which was firmly fixed against the internal opening of the crural canal, while the suture tightly closed the external aperture. The pubic and iliac portions of the fascia lata forming the margins of the saphenous opening were next sutured in a manner similar to that by which Macewen causes the external pillar to overlap the conjoined tendon in the inguinal operation. The result was apparent cure.

Encysted Vesical Calculi.

M. Berger (*Revue de Chirurgie*, November 10, 1888), at a recent meeting of the Société de Chirurgie, presented ten calculi, each of which had been imbedded in a vesical pouch, rendering operation very difficult. The rectal colpeurynter of Petersen had in this case greatly fatilitated their extraction, which was effected by the supra-pubic method. Two days later the patient died of interstitial nephritis, and numerous other calculi were found which had escaped observation.

At the same meeting MM. Nicaise and Poutier reported deaths from rupture of the rectum during the use of Petersen's dilator, and M. Despres stated that five deaths from this cause had already been reported to the Society. The quantity of liquid injected in M. Nicaise's case was about ten ounces.

Mr. Fenwick reported (*British Med. Journ.*, Nov. 17, 1888) an interesting case of encysted calculus in which the symptoms had lasted eight years. The calculus could be felt bimanually, and was subsequently discovered to be hour-glass in shape. The smaller piece (one ounce and a half) was found projecting into the bladder at the level of the left ureteral orifice, and the larger portion (four ounces and a half, the size and shape of a large hen's egg) lying in a diverticulum outside the back and base of the bladder. These two portions were connected by a very slender neck. The vesical piece was easily snapped off, leaving the neck protruding from the three-penny-piece-sized orifice of the diverticulum. The position of the opening rendered much dilatation of it dangerous.

It was impossible, therefore, to extract the encysted portion entire. Attempts to crush it, by means of lithotrite or forceps, failed. A chisel was guided through the orifice of the diverticulum and laid upon the stone; elastic counter-pressure was afforded by Petersen's rectal balloon. The calculus was then cut through by repeated blows with a mallet. After many shiftings of the pieces and sections in every direction, the stone was chiselled into sufficiently small fragments to allow of their being extracted through the orifice.

The wound rapidly healed, and the patient left for the country in six weeks without an untoward symptom.

The Artificial Augmentation of the Growth of Human Bone.

Max Schüller (*Deutsche med. Zeit.*, 1888, No. 99), in a communication to the Medical Society of Berlin, November 28, 1888, considers at some length the question of the artificial encouragement of bone-growth. The idea of the artificial increase of bone-growth is based obviously upon the general laws of normal growth, but rests also upon a series of pathological observations and upon numerous experimental researches into the conditions under which the increase or decrease of bone-formation occurred.

Langenbeck, Bergmann, Dittel, Tillmans, Ollier, and others, have recorded the results of their observations upon the regeneration of bones, and Helferich, Haab, and von Bidder have confirmed them experimentally. In young persons, still in the period of growth, it was especially noticed that after necrosis and chronic inflammatory processes, an hypertrophy of the bones occurred, especially when these processes affected the diaphysis. In the neighborhood of the epiphysis and of the inter-articular cartilage, the results are different. If the latter is destroyed, a decrease in bone-formation follows. It has been accepted as true that an irritation is transmitted from the inflamed bone to the epiphysis, and this gives rise to more active bone-production. Schüller, however, believes that the greater vascularity of the surrounding parts finds expression, through the articular cartilage, in the production of bone.

The pathological increase in bone-growth has more rarely been observed in fractures, in inflammation of joints, etc., but likewise only in children. Experiments show that after irritation of bone in young animals, either directly through the scratching of the periosteum, or by the introduction of pegs in the middle of the diaphysis, an elongation of the bone almost constantly followed, while destruction of the inter-articular cartilage was almost as constantly followed by atrophy. Ollier has applied these observations practically in a case of atrophy of the radius following ostitis, in which there were increased growth of the ulna and deviation of the hand to the radial side. By destruction of the lower cartilage of the ulna he was able by reason of the altered growth conditions to bring the hand back into its normal position.

Von Langenbeck recommended after resection of the knee-joint the introduction of an ivory peg, in order to avert consecutive shortening. He made the same proposal for cases of imperfect development in infantile paralysis, but never practically applied it. In 1887 von Helferich recommended the establishment of an artificial congestion in the affected limb by means of an elastic bandage, giving rise to increased activity of nutrition of the bones and of the whole limb. He has especially employed this in cases of delayed union after fracture, in the hastening of the separation of the sequestrum in necrosis, and even in sound individuals with extremities of unequal length, and in all of these cases with favorable results. In cases of infantile paralysis, however, no good effects were obtained.

Schüller, in these latter cases, adopted and tried the elastic bandage, combining with it other processes of local treatment, certain dietetic regulations, and, in some cases, different operative procedures. He applied an Esmarch tube in such a manner that it compressed the veins, but left the arterial supply free. At first it was removed in a few bones; afterward he left it in place day and night, having careful watch kept as to the effect. In addition, he used massage, bathing, diet favoring the assimilation of lime salts, regular exercise, etc. All the children thus treated grew stronger and better. In one case, a four year old child, with paralysis of the right leg and shortening of the femur of more than one centimetre, was treated for three months, the extremities then having become equal in length. In another, an otherwise healthy boy of nine years had crossed paresis and atrophy following infantile paralysis. The right arm and hand and the left leg were withered. Four months' treatment resulted in great improvement.

In another series of cases, in addition to the above-mentioned treatment, Schüller employed steel pins of different lengths inserted into the affected bones, with all antiseptic precautions, left for from five to nine days and then withdrawn.

He details three striking cases: one of infantile paralysis, with resulting paresis of both lower extremities, a paralytic pes calcaneus, and shortening of the tibia. One steel pin was inserted in the lower part of the tibia, and left for eight days. When the other treatment was begun, at the end of two months, the foot had gained four cm. in length and two cm. in breadth; the shortening of the extremity had disappeared; the ankle-joint, formerly flail-like, had recovered its strength; movement had returned to the toes; and the general cutaneous surface, formerly blue and cold, had regained its natural color and warmth. The second case was that of a patient fourteen years of age, who, when three years old, had undergone a resection of the ankle-joint leaving it loose and useless. Great improvement resulted. The third case proved that in a patient with genu-valgum it was possible so to localize the increased bone-growth as to correct the inequality in the lower end of the diaphysis which gives rise to the deformity. A steel pin was inserted two finger's-breadth above the knee-joint on the outer side. It was removed in five days. Two weeks later the other treatment was begun. In three months there was great improvement; in four and a half months the genu-valgum had disappeared; the femora had grown three cm. on the outer side, the form and line of the knee-joint had become normal.

In the discussion upon this paper, which occurred December 5, 1888, Herr Schüller emphasized the essential points of his treatment and his claims to originality, and has repeated them as follows in a letter to the Editor of THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES:

While much has been written upon the subject by the above-mentioned authors, none of them, not even von Langenbeck, employed in the human subject the method suggested. Ollier has only recorded two cases treated by scraping the periosteum, perforating the bones, etc. Helferich obtained some good results with a modification of the method of elastic compression suggested long before by other surgeons. Schüller, however, asserts that he was the first to aim at increasing bone-growth, not only by making the bone hyperæmic, but also by giving the shortened or withered limb a greater mass of blood, a more active circulation, and a larger support of nourishment having the quality of favoring bone-formation. By examination of the urine he has discovered what form of food, and which of the lime salts are best fitted to this end, having carefully estimated the quantities excreted and retained. The steel pegs need only be left for a short time, and may set up best a trifling degree of hyperæmia, but if this is followed by his combined treatment a continuous production of bone is almost sure to occur.

ARTHRECTOMY; ERASION OF JOINTS.

MR. EDMUND OWEN, in the course of a paper on this subject (*The British Medical Journal*, November 17, 1888), expressed the following views as to this operation, which is rapidly advancing in favor:

The construction of the hip-joint renders it unsuited for treatment by arthrectomy in chronic disease, but as a supplementary measure to resection of the head of the femur it is likely to prove of great value. The epiphyses may often escape mutilation, whilst the whole of the pulpy synovial membrane and all other diseased tissue are cleared out of the articulation. The cartilages joining the epiphysis with the shaft are neither disturbed nor trenched upon, and thus the risk of the patient's recovering with a greatly shortened limb is obviated. Indeed, it is even possible that the patient might recover, not only with a limb of normal length, but with a joint in which the movements are but little, if at all, interfered with. Such a result, however, is neither to be expected or aimed at.

After the operation, the limb is to be kept absolutely stiff, and fixed in splints for many months, and if, at the end of that time, a certain range of movement is discovered, the joint might be left to shake itself free, no manipulations being resorted to. In all probability, the knee will be synostosed and straight.

To cases of pulpy or chronic suppurative disease of the knee-joint the operation is admirably adapted, provided that the disease is not too far advanced, so that the bones are extensively implicated, and that the patient is the subject neither of general tuberculosis nor of albuminoid degeneration. In short, arthrectomy is the proper operation in most of those cases in which resection has hitherto been performed. Over resection it holds this great advantage, that it takes away from the articular surfaces only such tissues as are actually diseased.

On several occasions it has been noticed that after the joint had been thus thoroughly cleared of elements which were of a diseased or suspicious nature, the health of the patient had shown an immediate and marked improvement, appetite and general health altering for the better, and permanent convalescence being at once established.

Speculations were made upon the possible influence of the bacilli tuberculosis. The improvement which followed upon the clearing out of all the diseased tissues was as notable as that which often follows the amputation of a sarcomatous limb or a scirrhous mamma.

MR. G. B. WRIGHT (*The Lancet*, December 1, 1888) describes the operation and considers the most noticeable points to be: 1. Full exposure of every cranny in the joint. 2. Absolutely complete removal of all disease, scraping at any doubtful bony spots. Well-localized foci of disease in bone, if of limited extent, are no bar to success. The use of the cautery afterward is often good. 3. The crucial ligaments should be preserved, if possible, as they tend to steady the joint afterward. 4. The limb should be well fixed until healing is complete; then the patient may get about with crutches and a patten in a Thomas's knee-splint, or with the limb fixed in plaster of Paris. 5. As in excision, flexion will occur unless the limb is kept fixed for from two to three years at least. 6. In some cases actual lengthening of the limb occurs after the operation, just as overgrowth not uncommonly follows necrosis from acute periostitis.

THE LIMITATION OF FLEXION IN POSTERIOR LUXATIONS OF THE ELBOW.

DR. E. ZUCKERKANDL (*Deutsche Zeitschrift für Chirurgie*, Band xxviii., 1888) has made a series of experiments to determine the causes of the limitation of movements of flexion in cases of dislocation of both bones of the forearm backward. He finds that it is not due to the displacements of the bones, or to their directly impinging one upon the other, nor does it depend to any great extent upon the stretching of the muscles, but chiefly upon the ligaments, especially the internal and external lateral ligaments. His observations led him to believe that the most posterior fibres of the external lateral ligament are the strongest portions of the capsule of the joint, and exercise the greatest influence in limiting flexion. The smaller the portions of the ligament left untorn at the time of the accident, the greater the possibility of movement in the direction of flexion. If the lateral ligaments are entirely torn through, the movements of the luxated elbow-joint are free.

The most rational method of reduction in such cases seems to be by means of hyper-extension, lessening the effect of the lateral ligaments, and in some instances entirely eliminating it. By overstretching the joint the fibres of these ligaments are torn successively from before backward until finally only the thin posterior border of the capsule remains. Reposition by flexion or traction of the forearm can then easily be accomplished.

In the commonly employed method in which extension in the axis of the upper arm is made upon the forearm while it is flexed at a right angle, the resistance of the ligament is overcome by direct traction. This method would also become more easily effectual if, as a preliminary procedure, the ligamentous fibres at fault were first fully destroyed by a vigorous overstretching.

THE DISTRIBUTION OF PARALYSIS AND ANÆSTHESIA IN INJURIES OF THE CERVICAL SPINE.

MR. WILLIAM THORBURN (*British Medical Journal*, December 22, 1888), who has had exceptional experience in observing the results of injuries of the spine, records his observations upon the distribution of paralysis and anæsthesia in nineteen cases of traumatism of the cord between the fourth cervical and first dorsal vertebræ. He traces the exact extent of the paralysis in crushes and also of the consecutive ascending myelitis by observing the way in which the muscles of the upper limb subsequently become paralyzed. He gives a table of the muscular nuclei of the brachial enlargement, extending from the supra-spinatus to the interossei—*i. e.*, from the fourth cervical to the first dorsal nerve. In some of his cases the positions of the affected limbs were made so characteristic by the partial paralysis with which they were affected, that the diagnosis of the exact seat of the spinal lesion was made at a glance. As to anæsthesia, his cases bear out the conclusions arrived at recently by Dr. Ross (*Brain*, January, 1888)—*i. e.*, that the outer parts of the limb are supplied by the higher roots, the inner by the lower in continuous order.

From observation of a large number of cases of injury in the region of the brachial enlargement of the cord, he concludes that in all cases, however complex the symptoms may appear, we are able, by means of a careful consideration of the distribution of the paralysis and anæsthesia, to obtain a definite diagnosis. In this way many of the cases usually described as "concussion" of the cord may be much more accurately diagnosed. Of a total of about 350 railway accidents of all kinds, and 50 spinal injuries due to various causes, which have come under his observation, he has never yet seen an instance in which *spinal* symptoms were present where he could not definitely postulate some gross injury—fracture, hæmatomyelia, meningeal hemorrhage, myelitis, meningitis, or sprain, with pressure upon certain nerve roots, without requiring to fall back upon the unknown "molecular" changes supposed to constitute concussion; and, hence, he is strongly led to believe that such observation will enable us to detect many cases of imposture, in which symptoms are irreconcilable with any definitely localizable lesion.

OPHTHALMOLOGY.

UNDER THE CHARGE OF

GEORGE A. BERRY, M.B., F.R.C.S. EDIN.,

OPHTHALMIC SURGEON TO THE ROYAL INFIRMARY, EDINBURGH.

ON THE INJURIES TO THE EYES WHICH OCCURRED TO THE GERMAN ARMY IN THE WAR AGAINST FRANCE IN 1870–71.

A report, edited by the Medical Department of the Prussian War Office, with the assistance of the Medical Departments of the Bavarian, Saxon, and Wurtemburg Ministries, has just been issued. It is very complete and carefully compiled and deserves to occupy a place in the library of every ophthalmic student. In most respects it is a great improvement on similar reports in connection with other wars, and this greatly because of the more advanced state of ophthalmology at this time, and since the time of the Franco-German War.

Some points in the general statistics, which constitute the first section of the report, deserve attention. In all, 860 cases of injury to the eyes or to vision were recorded, a percentage of 0.86 of the whole number of wounded, and of 8.5 of the wounds of the head. Of these 860, 786 were cases of wounds of the eyes, and 64 such in which vision was in some way injured, or altogether destroyed, as the result of wounds to the brain and skull. This frequency of wounds to the eye is compared with that given in the statistics of other campaigns: thus in the French army, during the same war, the percentage was 0.81, and in the American war 1190 cases, or 0.5 of all the wounded, occurred. The left eye was more frequently wounded than the right in the proportion of 374 to 317, partly, it is supposed, owing to the position taken up by the infantry whilst firing, and partly to the protection which the gun affords to the right eye from individual bullet wounds. After de-